

REMARKS

The specification has been amended at page 19, line 17 by adding two paragraphs to provide specific terminology for support of claims 59 and 60. Support for these two new paragraphs resides in the specification at pages 3, 5, 6, and 16-19, and in the figures 15-33. No new matter has been added.

The claims 23-36 stand as allowed. Claims 38-40 have been withdrawn from consideration. However, these claims 38-40 each depend directly from allowed claim 23, and therefore, regardless of their reading on Species IIb are permitted to be reinstated as depending from the allowed genus claim 23.

Claims 41-57 and 63 stand withdrawn from consideration. Applicants reserve the right to reinstate these claims as depending from an allowed genus claim should an appropriate allowed genus claim be so allowed.

Claims 75 and 79 stand objected to for informal terminology. These claims have been amended to correct their recitation and to overcome the objection.

Claims 59-63 and 65-79 stand rejected under 35 USC 112, second paragraph, as being indefinite. Specifically, certain terminology recited in claims 59 and 60 did not appear in the specification with respect to this species (Species IIa). The specification at page 19 has been amended with respect to this species (Species IIa). It is urged that support now exists in the specification for the terminology appearing in these claims 59 and 60.

Claims 58-62, 64-67, 71 and 79 stand rejected under 35 USC 103(a) as being anticipated by Tanimoto (US 6,070,923) when viewed (read) with Mizuki (US 5,732,988). Therefore, the Examiner has determined that claims 68-71 and 72-78 are free of a prior art obviousness rejection.

This obviousness rejection of claims 58-62, 64-67, 71 and 79 is respectfully TRAVERSED. The Examiner is required to set forth in his Office Action: (A) the relevant

teachings of the prior art relied upon, including making reference to the relevant column of page number(s) and the line number(s) where appropriate; (B) the difference or differences in the claim over the applied reference(s); (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter; and (D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. See MPEP 706.02(j). The Examiner has failed to adequately provide all of this information, and in particular item (D) above, and therefore the standing rejection of claims 58-62, 64-67, 71 and 79 is without proper foundation.

To establish a *prima facie* case of obviousness the following three basic criteria must be met: 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to combine the specific reference(s) teachings; 2) there must be a reasonable expectation of success in combining the specific reference(s) teachings; and 3) the prior reference (or references when combined) must teach or suggest all of the claim limitations. See MPEP 706.02. The teachings or suggestion to combine and the reasonable expectation of success must both be found in the prior art and not based upon the applicant's disclosure. *In re Vaeck*, 947 F2d 488, 20 USPQ2d 1438 (Fed Cir 1991); also see MPEP 2143 - 2143.03 for additional decisions pertinent to each of the criteria. The initial burden is on the Examiner to provide support for a *prima facie* case. *Ex parte Clapp*, 277 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

In remarking on what in the prior art the Examiner has relied upon, the Examiner has failed to point out: (1) the suggestion or motivation in the references themselves or in the knowledge generally available which suggests a need or purpose for combining the specific references; (2) the reasonable expectation of success in combining the specific references; and (3) where the prior references teach or suggest all of the recited claim limitations. The Examiner has not justified a need, a purpose and a result for the combination of prior art

proposed. Whereof, the Examiner has not met his specific burden of providing support for a *prima facie* case and therefore the standing 35 USC 103 rejection must be withdrawn.

The Examiner has relied upon Tanimoto for a handle 5, pendulum 9, interlocking means 11, linking means 9, housing 2, a "keeper engaging member", "activator member 5 connect with the housing, means for connecting 9,11,12 (Fig. 9), wherein he has remarked that the Tanimoto linking means 9 is considered equivalent to applicants linking means. Furthermore, the Examiner considers the Tanimoto linking means 9 to be inherently capable of the recited function when the door is tilted between vertical and horizontal positions. Tanimoto is also relied upon for means connected to said pawl for biasing its position being spring 10.

Mizuki is relied upon for a vehicle door 2, door latch 6 having a pawl 10, pawl-retaining arm 11 and means for pivotally securing said housing and said pawl retaining arm (Fig. 3). Mizuki is also relied upon for a pair of forward arms on part 11 which engage part 9 (the Mizuki striker) and a rearward projecting arm 21. Lastly, Mizuki is relied upon for a keeper engaging member 10.

Applicants assert that the Examiner has miss-read the prior art in-part as will be discussed below. However, claims 58, 59 and 79 are being amended herein to more explicitly recite the limitations previously residing in these claims. There is no intention to change the scope of these claims.

Tanimoto shows a momentum lockout door latch, which becomes inoperative during a side impact (auto accident). What Tanimoto is concerned with is that the force of impact will throw the door handle 5 outwardly and thereby operate the door latch during a vehicle side impact. Tanimoto expressly teaches a first embodiment Figs. 1-5 (col 3, lines 27-28).

Tanimoto's first embodiment (col 3, lines 26-28) has twin arms 6, 6' which operate in tandem and are both connected to his handle 5. (See Fig. 1) The door opening arm 6' moves an extending rod 17 which operates an opening lever 18, which in turn operates a door lock

device 19. See Fig. 3). Normally, the other arm 6 is held in an upright position so that when the handle 5 moves, the handle lever 9 moves downward past the bifurcated stopper 13, which is used as a guide. The handle lever 9 is held against the back wall of the stopper 13 by the spring 10. (See Fig. 2).

Under the force of the momentum imparted to the Tanimoto device from a side accident, the force of the handle lever 9 spring 10 is overcome and the handle lever 9 moves into an intercept path with the flat stopper surface 14 whereby the shoulder 15 abuts the surface 15 precluding further downward motion of the arm 6. (See Fig. 5 for the abutment lock-out). As the arms 6 and 6' are connected to operate together, the movement of the lock device 19 activation rod 17 is stopped, and the door is locked out from opening.

The Tanimoto handle lever 9 is always connected to the handle 5 and the spring 10 is always exerting force on the handle lever 9. The handle position biasing spring 7 operates independently of the handle lever spring 10. While a side impact, which imparts a momentum to the handle 5, will cause the handle 5 to move once its spring force 7 is overcome, that spring 7 does not determine how lockout occurs. It is the other spring 10, which determines if lockout occurs and how fast the handle lever 9 swings to be blocked by the stopper surface 14. In fact, anyone of ordinary skill will need to know the mass of the handle, and the mass of the handle lever to design the handle lever spring 10. For lockout operation the spring force of the handle spring 7 is of lesser concern. However, spring 7 may affect the rate of acceleration of the handle 5 once the spring force 7 is overcome and the handle 5 flies outward in an accident.

Clearly, by reorienting the Tanimoto first embodiment device will not operate the handle 9 to a pivot operation into the phantom position of Fig. 5. That is because the handle lever spring 10 will keep it away from the abutment position even when the device is rotated 90 degrees.

Tanimoto shows a second embodiment Figs. 6-9 (col 4, lines 44-46) with an identical handle 5, twin arms 6, 6', a handle lever 9, and a handle lever spring 10 (Fig. 6). Like the first embodiment, this second embodiment has a handle spring 7 biasing the handle to the closed position. Like the first embodiment, in this second embodiment, the handle lever 9 is permanently connected to the handle 5 through the arm 6', shaft 4 and pin 8. The handle lever spring 10 holds the handle lever 9 in the position shown in Fig. 7 (col 4, line 65-67). In this position, when the handle 5 is operated the handle lever 9 moves downwardly and the step portion 11 (notch 11) engages the pin 12 on the opening lever 18 to operate that lever 18 and the attached lock device 19. (Fig. 8) During impact from an accident the handle lever spring force 10 is overcome and the handle lever 9 pivots against the spring 10 to the phantom position shown in Fig. 9. Figs. 8 and 9 have the handle arm marked as 6 (six) where in Fig. 6 it is marked as 6' (six prime). It is urged that Figs. 8 and 9 have an error in the numerals. From Fig. 6, it is easily understood the other tandem arm 6 apparently has no connections and is used operate in conjunction with the tail of the handle spring 7. The twin arms 6 and 6' provide the twin pivot arms for the handle and preclude the handle 5 from "cocking".

Tanimoto shows an further embodiment in Fig. 10 (a change) to his handle lever 9 of Figs. 6-9. Here instead of the notch 11, Tanimoto uses an L-shaped groove 20. This means not only that his handle 5 is permanently connected to his handle lever 9, but also his handle lever is permanently connected to the pin 12 and associated opening lever 18 and lock device 19. However, under the force of an impact, the spring 10 is overcome and the handle lever 9 swings in the direction A (Fig. 10) so that when the handle 5 opens and the arm 6' moves the handle lever 9 downward in direct B, the pin 12 is free to move up a short distance and thereby the opening lever 18 is not operated (this assumes a short "throw" for the handle lever).

When the Tanimoto second and third embodiments are rotated 90 degrees, the handle lever 9 will not pivot to the phantom position because the handle lever 9 is held fixed by the spring force 10.

Neither Tanimoto nor any one of ordinary skill would alter the Tanimoto device, and certainly not remove the handle lever spring 10. Auto accidents often involve secondary impacts and even multiple secondary impacts, to remove the spring 10 would be to take the control away from the Tanimoto device and render it potentially inoperative. Without the spring 10 the handle lever 9 could bounce about freely and its position would be unpredictable.

Moreover, to modify the permanent connection between the handle 5 and the handle lever 9 would also prove disastrous so as to render the Tanimoto device inoperative.

Mizuki shows a power door latch. Referring to Fig. 1, the door latch unit 6 has a housing mounting adjacent the level of the striker 9. A cable 15 is routed through the inside of an automobile door from a power unit. The power unit 30 is manually activated by an operator moving the opening handle 34. Also see Fig. 2. The latch 6 has a housing shown in phantom in Fig. 2 and in solid lines in Fig. 1. One of ordinary skill would not read the Mizuki door shell 2 as part of the latch "housing" as proposed by the Examiner.

Fig. 3 shows a front view of the latch unit 6 (it is understood that Figs. 3 and 4 show the structure without the solid housing shown in Fig. 1). Fig. 4 shows the other side of the latch (rear view). The cable 15 coming from the power unit 30 is shown in Fig. 4. This cable pulls the fan shaped cable lever 14 as a release mechanism.

When the automobile door is slammed shut the stricker 9 enters the latch housing 6 and moves (rotates counter-clockwise) the fork 10 so that the pawl 11 hook portion catches the small indentation of the fork. If the stricker 9 is thought of as a "keeper", the fork is a "pawl" and the pawl 11 is a "lock". The "lock" 11 must be moved up or rotated clockwise to release the "pawl" 10 to thereby release the "keeper" 9.

The rearward projecting arm 21 on the "pawl" 10 is not used to hold the "pawl" closed, but is used to rotate the "pawl" 10 into the fully closed position "y" when slamming the door only rotates it to the half-closed position "x". See Fig. 3 and col 2, lines 33-44. What occurs is that the power unit 30 operates the cable 15 to rotate the locking lever 13 and the cable lever 14. The movement (clockwise rotation for Fig. 3) of the locking lever 13 moves the link 19 which moves along the guide groove 18 to engage the rearward leg portion and thereby complete the rotation of fork/ pawl 10. The link 19 is pinned to the locking lever 13 with the pin 20 and has a second such pin which acts as a cam follower in the cam groove 18. The cable lever 14 and locking lever 13 are spring biased with spring 17 to the position shown in Figs. 3 and 4.

The lock/pawl 11 is pinned to pivot on the un-numbered pin. Its position is controlled by the rod 29 connected to the intermediate lever 28, connected to the pawl lever 26, which is connected to the lock/pawl 11 by the pin 27. The manual operation of the rod 29 moves the lock/pawl 11 upward in the unnumbered slot to release the pawl/ fork 10 to rotate. Without the rod 29 and connected levers 26, 28 and pin 27, the lock/ pawl 11 would not move. See Figs. 4-5 and col 2, lines 51-60. Rod 29 is also shown to be connected to the power unit 30 in Fig. 1.

On of ordinary skill would not transfer any of the structural shapes or structural members of Mizuki to Tanimoto. If one were to attempt this where would they be placed. Certainly Tanimoto's lockout structure of his first embodiment (Figs. 1-5) would not accept any Mizuki structure. If Mizuki's structure were attempted to be transferred to Tanimoto's second embodiment, where would it be placed ? How would it operate ? It would not and could not be operatively tranferred.

The Tanimoto device shows no pawl and no keeper. That is because the Tanimoto door does have a pawl and a keeper, but these structures have no place in the Tanimoto device. They are "down stream" from the Tanimoto locking device 19.

Applicants have clearly recited in the claims under obviousness rejection that his pendulum (linking means) disengages from his handle in the inoperative state. From the above review of Tanimoto, it should be clear that the Tanimoto linking means (handle lever 9) never is disconnected from his handle 5.

Applicants' claims under rejection have recited connecting means or linking means. There include the pendulum. Applicants' claims under rejection have recited interlocking means. This includes the retaining arm. Applicants' device has several main components: handle 200b, housing 100b, linking/connecting means 300, retaining/ interlocking means 700b, and keeper engaging pawl 400b. These are clear from Figs. 15-33 and the specification pages 3, 5, 6, and 16-19. The added recitation at page 19 line 17 should further repeat this structure.

It is urged that the application is now in condition for allowance with respect to claims 23-36, and 37-40, and 58-62, and 64-75. Applicant reserves the right to reinstate claims 41-57 and 63 as depend claims once a genus is determined allowable.

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pushing the pawl 400b towards its horizontal position. As the pawl 400b rotates, the pawl's rearward arm 446b pushes the pawl retaining arm 700b rearward, permitting the pawl 400b to rotate into a horizontal position. Once the pawl 400b is horizontal, the pawl-retaining arm 700b moves forward under spring pressure, to a position under the pawl's rear arm 446b. The keeper 600b is thereby secured within the channel 448b, and by the channel 114b in the housing 100b.

The unlatching of the latch 10b is controlled by the position of the pendulum 300. When the latch 10b is in its horizontal position, the pendulum 300 abuts the handle 200b, so that an upward pull on the handle 200b will push the pendulum 300 rearward. The pawl-retaining arm 700b will thereby also be pushed rearward, releasing the pawl 400b to rotate under spring pressure towards its unlatched position. The keeper 600b can then exit the latch 10b. When the latch 10b is in its vertical position, the pendulum 300 rotates away from the handle 200b, so that a pull on the handle 200b does not push rearward on the pendulum 300. Rotating the latch 10b back to its horizontal position causes the pendulum 300 to again rotate so that it abuts the handle 200b, permitting actuation of the latch 10b.

From the foregoing it is understood that in operation, this second embodiment is assembled to mechanically link the handle 200b to the retaining arm 700b through the pendulum 300 when the latch 10b is in the horizontal position, Fig. 15. Whereby when the handle 200b is moved, its rearward projecting flange 204b moves against the pendulum 300 which then moves the retaining arm 700b as the pendulum 300 is permanently linked to the retaining arm at the apertures 710b and when the latch 10b is in the horizontal position the pendulum 300 is interposed between the handle 200b and the retaining arm 700b. The retaining arm 700b thereby pivots on its pivot pin 704b and moves from engagement with the pawl 400b, permitting the pawl 400b to rotate under operation of its spring-biasing to the unlatched position. Specifically, the

retaining arm 700b had its opposite end 712b dimensioned and configured to engage the pawl 400b at its rearward arm 446b. When the retaining arm opposite end 712b engages the pawl 400b at its rearward arm 446b the pawl is thereby interlocked from movement.

When the latch 10b is in its vertical position it has rotated to disconnect the handle 200b from the retaining arm 700b. This unlinking occurs because the pendulum 300 has pivoted away, under the force of gravity, from being interposed between the handle 200b and the retaining arm 700b. In this non-interposed state the path of operation of the rearward projecting flange 204b of the handle 200b is no longer capable of contacting the pendulum 300 and the rearward motion of the flange 204b when the handle 200b is operated while the latch 10b is in the vertical position has no effect on the operation of the latch 10b.

A third embodiment of the latch 10c is illustrated in FIGS. 34-57. The housing 100c is illustrated in FIGS. 43-48. The front of the housing includes means for securing a button, which is preferably a pair of pegs 102c. The rear portion of the housing defines means for pivotally securing a pawl 400c, which preferably include a pair of flanges defining a pair of apertures 104c dimensioned and configured to receive a pivot rod 490c, illustrated in FIG. 57.

The latch 10c is actuated by depressing a button 200c, illustrated in FIGS. 41-42. The button 200c includes means for pivotally securing to the housing, preferably including a flange 202c protruding from the button's rear, with the flange 202c

pushing the pawl 400b towards its horizontal position. As the pawl 400b rotates, the pawl's rearward arm 446b pushes the pawl retaining arm 700b rearward, permitting the pawl 400b to rotate into a horizontal position. Once the pawl 400b is horizontal, the pawl-retaining arm 700b moves forward under spring pressure, to a position under the pawl's rear arm 446b. The keeper 600b is thereby secured within the channel 448b, and by the channel 114b in the housing 100b.

The unlatching of the latch 10b is controlled by the position of the pendulum 300. When the latch 10b is in its horizontal position, the pendulum 300 abuts the handle 200b, so that an upward pull on the handle 200b will push the pendulum 300 rearward. The pawl-retaining arm 700b will thereby also be pushed rearward, releasing the pawl 400b to rotate under spring pressure towards its unlatched position. The keeper 600b can then exit the latch 10b. When the latch 10b is in its vertical position, the pendulum 300 rotates away from the handle 200b, so that a pull on the handle 200b does not push rearward on the pendulum 300. Rotating the latch 10b back to its horizontal position causes the pendulum 300 to again rotate so that it abuts the handle 200b, permitting actuation of the latch 10b.

From the foregoing it is understood that in operation, this second embodiment is assembled to mechanically link the handle 200b to the retaining arm 700b though the pendulum 300 when the latch 10b is in the horizontal position, Fig. 15. Whereby when the handle 200b is moved, its rearward projecting flange 204b moves against the pendulum 300 which then moves the retaining arm 700b as the pendulum 300 is permanently linked to the retaining arm at the apertures 710b and when the latch 10b is in the horizontal position the pendulum 300 is interposed between the handle 200b and the retaining arm 700b. The retaining arm 700b thereby pivots on its pivot pin 704b and moves from engagement with the pawl 400b, permitting the pawl 400b to rotate under operation of its spring-biasing to the unlatched position. Specifically, the

retaining arm 700b had its opposite end 712b dimensioned and configured to engage the pawl 400b at its rearward arm 446b. When the retaining arm opposite end 712b engages the pawl 400b at its rearward arm 446b the pawl is thereby interlocked from movement.

When the latch 10b is in its vertical position it has rotated to disconnect the handle 200b from the retaining arm 700b. This unlinking occurs because the pendulum 300 has pivoted away, under the force of gravity, from being interposed between the handle 200b and the retaining arm 700b. In this non-interposed state the path of operation of the rearward projecting flange 204b of the handle 200b is no longer capable of contacting the pendulum 300 and the rearward motion of the flange 204b when the handle 200b is operated while the latch 10b is in the vertical position has no effect on the operation of the latch 10b.

A third embodiment of the latch 10c is illustrated in FIGS. 34-57. The housing 100c is illustrated in FIGS. 43-48. The front of the housing includes means for securing a button, which is preferably a pair of pegs 102c. The rear portion of the housing defines means for pivotally securing a pawl 400c, which preferably include a pair of flanges defining a pair of apertures 104c dimensioned and configured to receive a pivot rod 490c, illustrated in FIG. 57.

The latch 10c is actuated by depressing a button 200c, illustrated in FIGS. 41-42. The button 200c includes means for pivotally securing to the housing, preferably including a flange 202c protruding from the button's rear, with the flange 202c